

## 1995 SURVEY REPORT

**APPLE ERMINE MOTH** (*Yponomeuta malinellus* Zeller) - This detection survey was conducted under a grant from the USDA. All of the commercial apple growing areas of the state were surveyed, as well as a limited number of abandoned and backyard apple trees in the remainder of the state. Trap sites were selected at each inspector's discretion based upon risk, accessibility, and presence of suitable host material. There were approximately 146 traps placed in 30 counties across the state. Placement ranged from one to fourteen traps in a given county. No moths were detected. The insect is currently under quarantine by the state of Oregon and is known to occur in British Columbia, Washington, and Oregon. It could affect the export of susceptible nursery stock should it become established in Idaho.

**APPLE MAGGOT** (*Rhagoletis pomonella* (Walsh)) - A total of 67 traps were placed at 67 sites prior to July 1 near apple orchards or native hawthorn in Ada, Boise, Bonner, Canyon, Gem, Payette, and Washington counties of Idaho. The only positive catches were two sentinel sites in Boise county which caught a total of 10 adults, and those were all in native hawthorn. No catches were made in or near commercial apple orchards. This survey is performed to comply with quarantines instituted by the states of Washington, Arizona, Utah and for informational purposes for the export of apples to Mexico and other potential importers.

**CEREAL LEAF BEETLE** (*Oulema melanopus*) - Active infestations of the cereal leaf beetle were detected for the first time in 1992, in Franklin county south of Preston, in southeastern Idaho. Surveys in 1995 of 246 wheat, barley, or oat fields and a few roadside grass surveys in 43 counties in the state were carried out. A minimum of four to five fields per county were surveyed. Detections were made in seven counties for the first time this year (Bear Lake, Oneida, Cassia, Power, Bingham, Bonneville, and Blaine). The Bannock county infestation is an extension of the original Franklin county infestation. The infestations in the new counties were very isolated and population levels were very low. No parasite releases were made this year.

**CHERRY BARK TORTRIX** (*Enarmonia formosana*) - This detection survey was conducted under a grant from the USDA. All of the commercial cherry growing areas of the state were surveyed, as well as a limited number of abandoned and backyard cherry trees, and nurseries in the other areas of the state. There were 135 sites in 30 counties surveyed with 168 traps placed. No positive detections were made. The insect is currently under quarantine by the state of Oregon and is known to occur in British Columbia, Washington, and Oregon. It could affect the export of susceptible nursery stock should it become established in Idaho, and it is known to be a serious pest of producing cherry trees.

**EUROPEAN PINE SHOOT MOTH** (*Rhyacionia buoliana* (Denis & Schiffermüller)) - Limited infestations are known to exist in Ada, Canyon, Elmore, Gem, Kootenai, Latah and Nez Perce counties as determined by surveys performed over the past few years. In 1995, detection surveys were carried out in all areas of the state. Trap sites were selected at each inspector's discretion based upon risk, accessibility, and presence of suitable host material. There were 193 traps placed in 40 counties. New positive sites were found in Latah and Elmore counties. This survey is performed in support of the state's quarantine against this pest to track its movement across the state for compliance with California, Oregon and Canadian quarantines.

**JAPANESE BEETLE** (*Popillia japonica* Newman) - The trapping program was expanded over the 1993 program. Traps were placed at many of the larger nurseries across the state that were known to handle large quantities of container and/or balled and burlap nursery stock, as well as recently landscaped properties, such as commercial office parks, golf courses, and apartment complexes.

There were 219 traps placed in 185 sites in 38 counties statewide. Traps were placed the last week of June and picked up during the last week of September or first week of October. All traps were checked every two weeks. Trapping was carried out on a site selection basis by Plant Industry inspectors with emphasis being placed on nurseries, golf courses, offices parks, landfills and apartment complexes. No positive detections were made at any sites during 1995.

Four beetles (one male and three females) were caught in 1992, at a Boise (Ada) nursery. In 1993 only a single male was detected. No feeding signs were found on any plant materials in the nursery or adjacent grounds. The 1993, detection is believed to be due to some reproduction from beetles caught at this nursery in 1992. The nursery was treated with both granular and liquid insecticide under state supervision during 1992, 1993 and 1994. No beetles were detected at this site during 1994 or 1995. This survey is performed to support a state quarantine against this pest being shipped into the state from infested eastern states.

**MEXICAN BEAN BEETLE** (*Epilachna varivestis* (Mulsant)) - One area in Boise continues to be surveyed. A total of 757 gardens were inspected. The parasitic wasp *Pediobius foveolatus* was released weekly in areas where beetle infestations had been observed in the past. Ten thousand wasps were released for seven consecutive weeks from mid-July to late-August. Parasite releases are used to augment any chemical treatment of infested gardens, in that the parasites will help to control larvae feeding on wild or undetected hosts in the vicinity of infested gardens. No Mexican bean beetle life stages were observed for the third year in a row. This program has been carried out for almost two decades to prevent the establishment of the beetle in the commercial bean growing areas of the state. We are declaring this infestation eradicated.

**LATE BLIGHT A2 STRAIN** (*Phytophthora infestans* Mont.) - was found in Southwest Idaho in both Magic and Treasure Valley. It was quite wide-spread and necessitated a lot of fungicide spraying. Yield and quality has affected some fields in Treasure Valley, depending on when they became infected. Fields in Magic Valley may not have been badly affected because they were infected late in the season. No fields have been found infected east of the Raft River area. Surveying was stopped after the outbreak became widespread in early August.

**MEDITERRANEAN FRUIT FLY** (*Ceratitis capitata*) - This survey is carried out as part of an export program for the shipment of apples to the Peoples Republic of China. One commercial orchard registered for the program and 48 traps were placed in four counties where that producer has eligible orchards. The traps were placed at a rate of one per 250 acres of orchard and perimeter trapping at a rate of one per square kilometer of existing host material around each orchard. Three traps were placed with the packing facility all traps were serviced monthly. Field traps were kept in place from April through harvest and the facility traps were maintained year-round. No fruit flies were detected.

**ORIENTAL FRUIT MOTH** (*Grapholita molesta*) - Eight traps were placed in two nurseries in northern Idaho as part of the virus-indexing program for the exportation of *Prunus* and *Malus* nursery stock to Canada. No moths were caught.

#### ***Diseases Found During 1995 Field Inspections***

- **Alfalfa** - Stem and End Rot (*Fusarium oxysporum*) was found in one field. Spring Black Stem *Phoma* sp. was found in one field and Common Leaf Spot was found in 12 fields. Dodder *Cuscuta* sp. was found in 12 fields. Samples from three fields were checked for stem and bulb nematode, but they turned out to be negative. All of the above finds were in Treasure Valley.
- **Radish** - One field of white rust (*Albugo candida*) was found in Treasure Valley.
- **Mint** - *Verticillium* wilt (*Verticillium dahliae*) was found in 2 fields in Treasure Valley. Mint fields are still undergoing field inspections.
- **Corn** - Ten fields were found to be positive for High Plains Virus. Head and Common Smut were observed in numerous fields, but were less common than last year. Several fields with environmental or physiological disorders were observed, some of the symptoms mimicked Northern Corn Leaf Blight and Eyespot. All of the above corn disease were observed in Treasure Valley.
- **Peas** - Two fields in Treasure Valley and four fields in Magic Valley were found positive for pea bacterial blight (*Pseudomonas syringae* pv. *pisi*). Six fields in Magic Valley and three fields in Northern Idaho were found infected with Downy Mildew (*Pernospora pisi*). Leaf spot (*Ascochyta* sp.) was observed in four fields in Magic Valley.

- **Beans** - Brown Spot was observed in 5 fields in Magic Valley. Fusarium sp. was widespread. White Mold (*Sclerotinia sclerotiorum*) and Bean Rust (at windrow inspection) were observed at several locations in Treasure Valley.
- **Carrot** - Bacterial Soft Rot (*Erwinia carotovora*) was observed in two fields and Bacterial Blight (*Xanthomonas campestris* pv. *carotae*) in one field in Treasure Valley. Fields were generally weedier and later maturing than last year.
- **Onion/Leek/Chive** - Purple blotch (*Alternaria porri*) was observed in four fields, *Botrytis* sp. in seven fields and Downy Mildew (*Sclerotium cepivorum*) in three fields in Treasure Valley.
- ACREAGES SUBMITTED FOR INSPECTION 1995 FOR EXPORT CERTIFICATION

SPECIES	NO. FIELDS	SUBMITTED ACRES
Alfalfa	376	6665.50
Barley	2	3.01
Beans, Dry	320	6283.30
Beans, Garden	1413	21903.00
Cabbage	3	22.00
Cantaloupe	2	6.00
Carrot	39	226.00
Chive	6	43.00
Corn	700	6961.80
Corn, Area	328	2632.98
Cucumber	6	9.25
Leek	6	22.00
Lettuce	45	317.58
Mint	38	601.70
Onion	56	355.90
Peas	619	17001.50
Peas, Area	181	7926.80
Pepper, Bell	6	31.20
Pumpkin	8	.95
Radish	13	113.50
Red Clover	1	.25
Squash	26	11.28
Watermelon	1	.50
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<b>Total</b>	<b>4195</b>	<b>71139.00</b>

Prepared by: Michael E. Cooper, Chief, Bureau of Feeds and Plant Services